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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/820,844 | 03/30/2001 | Sadayuki Iwai | 205379US0 | 7041 |

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| EXAMINER |
|---|
| FERGUSON, LAWRENCE D |

| ART UNIT | PAPER NUMBER |
|---|---|
| 1774 | 7 |

DATE MAILED: 10/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

| Offic Action Summary | Application No. 09/820,844 | Applicant(s) IWAI, SADAYUKI |
|---|---|---|
| | Examiner Lawrence D Ferguson | Art Unit 1774 |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-98* is/are pending in the application.

4a) Of the above claim(s) *1-48,97 and 98* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *49-96* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

   I. Claims 1-48, drawn to method of making an intermediate image transfer belt, classified in class 264, subclass 299.

   II. Claims 49-96, drawn to an intermediate transfer belt, classified in class 428, subclass 212.

   III. Claims 97-98, drawn to an image forming apparatus, classified in class 399, subclass 176.

2. Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product can be made by forming an intermediate image transfer belt by using an sintering the transfer belt material.

3. Inventions I and III are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case, the process can be used in an extruding apparatus.

4. Inventions II and III are related as apparatus and product made. The inventions in this relationship are distinct if either or both of the following can be shown: (1) that the apparatus as claimed is not an obvious apparatus for making the product and the apparatus can be used for making a different product or (2) that the product as claimed can be made by another and materially different apparatus (MPEP § 806.05(g)). In this case, the product can be made by an extruding apparatus.

5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

6. During a telephone conversation with Frederick Vastine on May 08, 2002, a provisional election was made with traverse to prosecute the invention of Group II, claims 49-96. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-48 and 97-98, withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently name inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

***Claim Rejections – 35 USC § 103(a)***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 49-96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al. (U.S. 5,978,638).

12. Tanaka discloses an image forming apparatus for forming a toner image by use of an intermediate transfer belt (abstract and column 3, lines 61-67) having a hardness (column 4, line 13). Tanaka discloses the image forming apparatus comprising an elastic layer of rubber (column 5, lines 1-3) and polyurethane material (column 8,line 43 and column 11,line 15). In claim 49, Applicant discloses an image forming apparatus that includes an image carrier for forming a latent image and for developing said latent image, which is considered to be intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See In re Casey, 152 USPQ 235 (CCPA 1967) and In re Otto, 136 USPQ 458, 459 (CCPA 1963). Additionally, intended use is given little patentable weight. In claim 49, Applicant further states, 'a first raw

liquid material is fed into a hollow, cylindrical mold...' along with 'the first raw material is cured to thereby form a first endless belt layer.' This is product by process claim limitation language that is found throughout Applicants' claims 49 and 73. Additionally, Applicant claims the hardness is measured by JIS A scale, which is also considered to be a product by process claim limitation. "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966. Tanaka does not specifically disclose the thickness of the belt layers. Thickness is an optimizable feature. It would have been obvious to one of ordinary skill in the art to optimize the components because discovering optimum or workable ranges involves only routine skill in the art. *In re Aller* 105 USPQ 233 and see *In re Boesch*, 617 F. 2d USPQQ 215. Although Tanaka does not disclose a gloss value, because the reference discloses an intermediate transfer belt with the same materials as Applicant with the same function, it would have been obvious to one of ordinary skill in the art to include a gloss value, absent any evidence to the contrary.

***Claim R j ctions – 35 USC § 103(a)***

13. Claims 49-96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al. (U.S. 5,610,691).

14. Takahashi discloses an image forming apparatus including an image carrier having a developing device where an image is transferred to a transfer member (abstract) having a rubber elastic layer and toner (column 3,lines 29-34) where there is a formed intermediate layer (column 4, lines 50-51) where the intermediate transfer belt comprises polyurethane (column 5, lines 15). In claim 49, Applicant discloses an image forming apparatus that includes an image carrier for forming a latent image and for developing said latent image, which is considered to be intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See In re Casey, 152 USPQ 235 (CCPA 1967) and In re Otto, 136 USPQ 458, 459 (CCPA 1963). Additionally, Applicant claims the hardness is measured by JIS A scale, which is also considered to be a product by process claim limitation. "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or

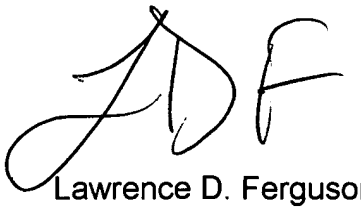
obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966. Tanaka does not specifically disclose the thickness of the belt layers. Thickness is an optimizable feature. It would have been obvious to one of ordinary skill in the art to optimize the components because discovering optimum or workable ranges involves only routine skill in the art. *In re Aller* 105 USPQ 233 and see *In re Boesch*, 617 F. 2d USPQQ 215. Although Tanaka does not disclose a gloss value, because the reference discloses an intermediate transfer belt with the same materials as Applicant with the same function, it would have been obvious to one of ordinary skill in the art to include a gloss value, absent any evidence to the contrary.

***Conclusion***

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Ferguson whose telephone number is (703) 305-9978. The examiner can normally be reached on Monday through Friday 8:30 AM – 4:30PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (703) 308-0449. Please allow the examiner twenty-four hours to return your call.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for

After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2351.



Lawrence D. Ferguson
Examiner
Art Unit 1774

CYNTHIA H. KELLY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700